CABLE REVIEW MEETING SUMMARY

April 19, 2001

Present: D. Ayres, D. Boehnlein, A. Byon-Wagner, J. Elias, J. Priest, D. Saranen, K. Schuh, J. Thron

1. The means of flame/smoke mitigation for the far detector front end readout cables remains unresolved. J. Priest reported that the no-burn coating being tested does not adhere well to cable. However, a clear coating that forms a charred layer to retard the spread of flame seems more promising and Jim will continue tests with this. It would be helpful if he had a sample of the actual cable on which it will be used. K. Schuh reported that he has not yet received the Zipper Tubing sample from Harvard.

2. The technical specifications for the ribbon-coax cable proposed for the near detector photomultiplier tubes do not include a fire rating. C. Nelson has given a small sample to J. Priest for flame testing. J. Priest reported that the cable "does not look promising" in terms of fire/smoke safety, but will conduct tests on the sample.

3. The committee did not approve either of the cables proposed for the DCS environmental monitoring systems, and makes the following suggestions:

a. If possible, it is probably a good idea to standardize the environmental readout cables and use only one type for both the temperature/humidity and the barometric pressure readouts. Another DCS cable, for which a checklist has not yet been received, is the cable for control & monitoring of the magnet power supply and should be considered in the standardization. Based on the checklists, this could be a 4-wire (or 2-pair) cable. A communication cable, such as is used for ethernet, could also be considered.

b. The Belden cable submitted could be a candidate for the standardized cable, but more information is needed. Two items left blank on the checklist, the power conductor ampacity and the overcurrent protection, must be filled in.

c. Before approving any cable, the committee needs to know more about the Fieldpoint unit and sensors: How much current can the Fieldpoint unit produce (the anticipated draw is in mA, but the units' potential should be specified).

4. D. Saranen reported that he has found four candidate LAN cables other than those recommended by the Fermilab Computing Division. He has yet to locate a vendor for them. K. Schuh recommended checking the Newark web site.

Action Items

1. J. Priest will continue testing the clear coating for cables. D. Boehnlein will request that J. Oliver send a sample (several meters if possible) for the tests.

2. K. Schuh will conduct flame spread tests on the packed Zipper Tubing sample when it arrives at Fermilab.

3. D. Boehnlein will meet with A. Habig and determine to what extent DCS cable standardization is feasible.

4. C. Velissaris will provide the information for items 3.b and 3.c above.

5. D. Saranen will search for vendors for an appropriate LAN cable.